





# BULLETIN OF THE HARVARD MEDICAL SCHOOL ALUMNI ASSOCIATION

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## EDITORIAL

### THE CLASS OF 1904

On June 10th next, the Class of 1904 will celebrate its twenty-fifth anniversary. The entire day will be devoted to the reunion. In the morning there will be a general inspection of the School, followed by a series of brief talks by various members of the Class. Luncheon will be served in the new dormitory. The entire building will be thrown open for the Class to admire. The afternoon will be spent at the Brookline Country Club. Some will want to play soft baseball, others will want to gather with a group of their former old cronies and discuss the affairs of a quarter of a century. In any event it will be a quiet and peaceful afternoon of companionship. Dinner will be served in the evening at the Harvard Club. A few of those who taught us in the School will be there and will be called upon for a little speech.

The object of this communication is

two-fold, first to tell the world what this illustrious class intends to do at its twenty-fifth birthday party; second, to make it known, especially to those classes which follow 1904, that we have already raised a certain amount of money; that we intend to raise a little more before the party is held, and that we are going to give it to the School as the nucleus of an Alumni Fund. The income can be used for any purpose designated by the authorities; the principal must not be touched but will be increased by gifts from the classes which follow us. In the course of a comparatively few years the principal sum will be of considerable size and the income such that it can do some real good.

The Medical School, like all other institutions of its kind, gets little or no wholly unrestricted money and a gift such as we propose to make will be doubly welcome. While there will be no tablet in the halls of the Medical School stating that this Class gave a certain

sum it will be recorded in the memory if not in the books that this Class of 1904 is the first to have made a gift to the School on its twenty-fifth anniversary. It is hoped that other classes will be inspired to make similar gifts so that there will eventually be an Alumni Fund of large and ever increasing size.

## GRADUATE SCHOOLS DAY

An excellent custom has developed in recent years about the annual meeting of the Associated Harvard Clubs, in having a day set apart for the Graduate Schools. The Associated Harvard Club is not an organization devoted to the interests of the graduates of Harvard College; it is for all former members of the University, and its object is to increase and rejuvenate their interest in all matters pertaining to the University, and incidentally to have a good time together once a year, renewing old friendships and making new ones. The Associated Harvard Club constitutes a very big family, and their meeting together once a year is a family party. To this party the former members of the Graduate Schools are urged to come, for

they are an integral part of the group.

Graduate Schools Day at the meeting in Cincinnati this year comes on May 23, and plans are on foot to make it an interesting and agreeable one. The tentative program for the Medical School graduates is somewhat as follows: Arriving in Cincinnati at about 10 A. M. Business meeting at the College of Medicine at about 11:00. Luncheon at College lunchroom at 12:30, with a talk by some graduate. After lunch inspection of hospitals with perhaps clinics. Evening meeting for all the Graduate Schools, with a medical speaker.

This, of course, is tentative; the final program will be sent out later, but in the meantime let us adopt the slogan, "I'll see you in Cincinnati!"

## IMPRESSIONS OF ICELAND

BY ALAN GREGG

A small steamer leaving Leith, the port of Edinburgh, on a Tuesday morning and making brief calls at the Faroe & Vestmann Islands, will reach Reykjavik, the capital of Iceland, on Friday night after a voyage that increases respect for the Norsemen who in the ninth century came as settlers to Iceland in open boats. Reykja means smoke and vik means bay—since from the sea they saw the columns of steam rising from springs and streams of hot water—a common sight in the bleak and moun-

tainous assemblages of lava, basalt, snow and glaciers which make up most of the landscapes in Iceland.

It is a stark and rugged country—with large areas too uncertain of warmth to sustain life—an area the size of Kentucky but with 1/25 of Kentucky's population—only 100,000 people scattered in isolated farms and in fishing villages. The soil is good. The rain and snowfall are quite comparable with other lands. In Montreal it gets colder in winter than the inhabited parts of Ice-

land. And yet in few countries is life harder to maintain. Because there are only two months of summer—with August the days begin to shorten perceptibly and grow colder—vegetation has but little chance and so Iceland is treeless, fruitless, and grainless, with potatoes and turnips as the only vegetables. Add to those capital defects the absence of clay, limestone, coal, iron ore or any satisfactory building material, and you will see under what enormous handicaps these descendants of the Vikings have chosen tenaciously to cling to life in Ultima Thule.

The World Almanack notes tersely "Imports include all necessities." One might add "and few luxuries." Indeed it is almost true to say that all necessities are imported, for even the cement, sheet iron, bricks and wood of all the houses in Reykjavik have been imported. From sheep and fish Icelanders live and manage to import nearly everything else. They keep cows and horses on their scant hay crop, but no pigs. For cooking food on the farms they burn turf sparingly, but not for heating the houses—this is done by animal heat from cows in the basement, or where there is not that arrangement there is no heat except the warmth of well-clad people. Of course, in Reykjavik and some of the villages there is imported coal and the houses are modern and comfortable. One of the new hospitals is heated by hot water from a hot spring nearby.

In the past 30 years the application of machinery has been revolutionary in its effect. Gasoline fishing-boats and small steam trawlers have enormously increased the use of the apparently ilimitable food supply of the sea. Hydroelectric development even on isolated farms is beginning to come in. The

Dean of the Medical Faculty, among his numerous other activities, has shown the Icelandic farmers how to build concrete houses and barns and will well deserve the epitaph he hopes for "Gudmunder Hannesson. He taught the Icelandic farmers how to build warm houses."

There is good evidence to believe with the Icelanders that living has been so precarious and so difficult that only the rugged and capable have survived. Certainly there have been centuries when only by providence, thrift and courage and unremitting work, could a man and his wife secure a family's livelihood. To make a farm pay required talents and qualifications of no ordinary sort. In the 17th century, for example, the only implement obtainable for agriculture was a pony's scapula. Towards the end of this miserable age, a cleric of that period bitterly berated the luxuriousness of the young girls who insisted on such a tool for cleaning out the stables.

From a medical standpoint, there are some interesting variations in the incidence and severity of common diseases. Pneumonia and pulmonary tuberculosis are common. Cancer, especially in the digestive tract, has a high rate of incidence. Leprosy exists, but is rapidly diminishing. Echinococcus cyst is very common, though this disease also is less common than 20 years ago. Syphilis is rare; tabes and general paralysis almost unknown. Diabetes, lupus, acute rheumatic fever and endocarditis extremely rare. Acute glaucoma unknown, chronic glaucoma frequent. Typhoid, diphtheria, and measles, are about as elsewhere, but scarlet fever is so benign as to be almost insignificant. Rickets is very rare. The death-rate from 1916-20 was 14.1, the living birth-rate 26.1. The infant mortality was 68



for 1916-20. 313 for the years 1841-50. Accidents cause more deaths than cerebral apoplexy, ranking sixth in the order of causes for death, and drowning accounts for two-thirds of the accidental deaths.

Iceland would prove a most interesting field for epidemiological studies. Reykjavik has a population of about 23,000 but there are only five other towns with populations between 1000 and 3000. The influenza epidemic of 1918—indeed many subsequent epidemics of acute respiratory diseases—can be traced quite definitely in its march around the coastal settlements.

The language of the people is Icelandic and it is the oldest language in Europe—i.e. the least modified, being almost exactly the same as the tongue spoken by the Vikings. To the constant reading and reciting during the long winter nights of their sagas and rimur, must be attributed the Icelanders' preservation of their forefathers' speech. Regardless of their incredible hardships, the Icelanders insist upon books in their bare dwelling-places. Dr. Hannesson as a boy knew only four books, but he knew

them well—the Iliad, the Bible, the Arabian Nights and the Autobiography of Benjamin Franklin. And today their National Library—an excellent building—contains more volumes than the country contains people—a unique boast!

The life of the physician in Iceland—unless one includes thirty doctors in Reykjavik—is that of a lonely isolated district physician. There are some fifty of these men and they must “go it alone” under conditions similar to frontier days in America. The medical school at Reykjavik provides a four or five years course and all its graduates must supplement their meagre but thorough clinical experience by two years in some European clinic. Their teachers in Reykjavik have all been district physicians and know what conditions their pupils will face on return from Europe. The students are from five to ten in a class—the facilities poor, but the earnestness and thoroughness of the teachers recall Mark Hopkins and the log, and there are worse schools of medicine in the world though few more simple and unpretentious.

20, Rue de la Baume, Paris.

## RECENT USES OF BISMUTH IN MEDICINE

BY PHILIP ADOLPH KOBER

Although insoluble bismuth compounds have been used for many years in the treatment of gastro-intestinal diseases, the injection of bismuth in different forms for the treatment of systemic and cutaneous diseases is of very recent origin, dating back to about 1921. This modern use of bismuth has developed some very unique and astonishing properties of bismuth, which are rapidly

spreading its use in medicine, and which it is the purpose of these notes to emphasize and to discuss.

The most prominent of these applications of bismuth started with the treatment of syphilis and other dermatological conditions. When bismuth is brought into the circulation in suitable form and quantities it has very definite spirochetidal action, both on the symp-

tomatic and serological aspects of the disease. Per unit of weight it has as much if not more spirocheticidal action than the arsphenamines. When introduced properly into the circulation it also shows marked diuretic properties. Owing to its markedly leucocytotic action it is often administered to raise the resistance mechanism of the body in certain diseases. It also has been found very effective in the treatment of "Trench Mouth," Vincent's Infection.

The above uses of bismuth are ample to demonstrate its value in medicine, but when its low toxicity is taken into consideration—the therapeutic dose being one thousandth to one fourteen hundredth (1 From the *Research Laboratories of G. D. Searle & Co.*, Chicago, Ill.) of the estimated tolerated dose, it must be admitted that this makes bismuth a unique remedy in modern medicine and one worthy of further study and application.

#### THE PROBLEM OF INTRODUCING BISMUTH INTO THE CIRCULATION

Most bismuth compounds being very insoluble cannot be administered intravenously or given orally. A few water soluble bismuth compounds are either unstable or highly irritating when injected intramuscularly. The attempt to overcome these difficulties of both soluble and insoluble compounds of bismuth by suspending them in oil or other menstrua and injecting the suspensions intramuscularly while partly successful has met with a number of serious objections which makes it difficult to obtain always the full chemotherapeutic effect and the benefit of its low toxicity.

The objections are:

(1) Owing to the oil or insolubility of the bismuth compound used, the absorption from the sites of injections

into the blood stream is slow and irregular. Cole, Farmer and Miskdjian, (*Archives of Derm. & Syph.* 13, 219, 1926) showed that from 24 to 144 days were required to reduce the amount of bismuth suspensions in the sites of injections so that they were not exhibited by the X-Ray. N. Oettingen, Todd and Sollmann, (*Journ. of Pharm. & Exp. Therapeutics* XXXII, 67 1927), showed by chemical analyses that when no longer detectable by the X-Ray, considerable bismuth was still left unabsorbed. Therefore with these suspensions the amount of bismuth getting into circulation was very uncertain and uncontrollable.

(2) If these suspensions went into the circulation directly by getting the needle in the vein or by back leakage along the track of a needle that had pierced a vein or arteriole, embolism of more or less serious character resulted.

(3) Nodules or as the work of Jorsted and Glenn, (*J. A. M. A.* 90, 26 1928) indicates, oil tumors are often formed by oil suspensions.

(4) The oil does not prevent the solid particles in suspension from causing irritation and perhaps necrosis to the surrounding tissues.

(5) Occasionally after a large number of deposits had been made, sudden increased absorption due to the digestive action of leucocytosis on the oils, too much bismuth was absorbed with the resulting bismuth intoxication.

#### THE SOLUTION OF THE PROBLEM

Since the activity of bismuth compounds is almost wholly independent of the type of compound introduced into the circulation, it is therefore the bismuth ion which is the essential constituent. Therefore a simple but stable water soluble complex of bismuth that

is easily absorbed and causes no irritation would eliminate all of these objections raised against the suspensions. The writer after a lengthy research succeeded in developing such a product.<sup>1</sup> It is a Bismuth Sodium Tartrate complex and possesses the following characteristics:

(1) Presents high bismuth content (74 parts Bi in 100 parts of the salt) and produces a stable aqueous solution even when heated to boiling. (2) Non-irritating and free from pain. (3) No tendency to nodule formation when injected into the muscles. (4) Eliminates the danger of embolism inherent in fatty or oily suspensions. (5) Prompt and uniform absorption (2 to 3 days). (6) Suitably buffered and therefore suffers no decomposition in the muscular tissues when lactic acid is produced in the muscles from exercising. (7) Low Toxicity. White rats injected intramuscularly with the Bismuth Sodium Tartrate Complex showed a toleration that

would be equivalent to 1400 ampuls for a man weighing 150 pounds (68 kilograms), and when injected intravenously showed a toleration that would be equivalent to 37 ampuls for a man of the same weight.

#### SUMMARY

Bismuth can now be administered with ease in an almost non-toxic solution, and the amount finding its way into circulation can be approximated and controlled. When signs of saturation appear or when in rare instances signs of hypersensitivity are found, the cessation of treatment quickly removes the source of bismuth and therefore causes the quick disappearance of the symptoms of intolerance.

(1) *Kober, Journ. Lab.* XII, 962 (1927). The exact valuation of bismuth in medicine can only be based upon the amount brought into the circulation and not upon the amount deposited in sites of intramuscular injection.

### CLASS OF 1919—DECENNIAL REPORT

#### STUART WELSH ADLER

635 West Broadway, Winona, Minn.  
March 1, 1929, 421 Safety Building, Rock Island, Illinois.

*Married*—Mildred E. Scott of Winona.

*Children*—Mary, age 3, Scott, age 20 months.

*Type of Work*—Pediatrics.

*Special Work—Publications*—Three listed papers in Minnesota Medicine.

*Offices Held*—1928, President County Medical Society.

*Remarks*—Spent 6 months on a short time fellowship in Pediatrics at Mayo Clinic, April to October 1928.

#### FORREST BERTRAM AMES

355 Center Street, Bangor Maine, or Eastern Maine General Hospital.

*Married*—June 8, 1921 to Mildred M. Wilder of Dorchester, Mass.

*Children*—Janice M. Ames, age 5 years.

*Type of Work*—Roentgenologist, full time.

*Special Work—Publications*—"Roentgen

Ray and Tuberculosis in Infants and Children" *Journal A. M. A.* May 28, 1921. *Boston Medical and Surgical Journal*, August 24, 1922; "Roentgenological Aspects of Some Intrathoracic Lesions, *Journal Maine Medical Association*, March 1928.

*Offices Held*—Roentgenologist, Eastern Maine General Hospital.

#### ARTHUR J. ATTRIDGE

595 Broadway, South Boston, Mass.

*Married*—Yes.

*Children*—Three.

*Type of Work*—General Practice.

#### WARREN G. ATWOOD

151 Rock St., Fall River, Mass.

*Married*—Yes.

*Children*—One.

*Type of work*—Obstetrics and Surgery.

*Offices Held*—Ostetrician and Assistant Surgeon, Truesdale Hospital, Fall River, Mass.





